

PRODUCT IDENTIFICATION



Product Name: Sodium Chlorite Flakes 80% - Technical Grade

CAS Number: 7758-19-2

Molecular Formula: ClNaO_2

Molecular Weight: 90.44 g/mol

Grade: Technical Grade

Purity / Concentration: 80%

Synonyms: Sodium Chlorite Powder, Sodium Chlorite Crystals

PRODUCT OVERVIEW

Sodium Chlorite Flakes 80% is a high-purity technical grade oxidizing agent presented in a stable crystalline form. With a controlled moisture content of 1% and minimal impurities, this product is designed for consistent performance in demanding industrial and laboratory applications.

Grade Significance: Technical Grade indicates that the product is manufactured to meet rigorous industrial standards, providing a balance of high purity and cost-effectiveness for non-pharmaceutical or non-food applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay	%	80	79	81	Titration/Gravimetric
Specific Gravity (20°C)	g/mL	1.6	1.595	1.605	Hydrometer @ 20°C
Moisture	%	1	0	2	Karl Fischer
Arsenic As	ppm	0.0010	0	0.0030	ICP-MS
Calcium Ca	%	0.05	0	0.1	ICP-MS
Iron	ppm	5	0	10	ICP
Magnesium Mg	%	0.02	0	0.05	ICP-MS
Chloride Cl	%	0.1	0	0.2	ICP
Sulfate (SO_4^{2-})	%	0.05	0	0.1	ICP-MS
Insoluble Matter	%	0.05	0	0.1	Gravimetric

ND = Not Detected. Values are typical and may vary by lot.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	White to slightly yellow crystals/flakes; odorless	Form	Flakes / crystalline solid
Melting / Freezing Point	~190 °C (decomposes)	Flash Point	Not applicable
Solubility	Highly soluble; ~545 g/L at 20 °C	Molecular Formula	ClNaO_2
Molecular Weight	90.44 g/mol		

APPLICATIONS

1. **Water Treatment** — Used as a precursor for the generation of chlorine dioxide to effectively disinfect water supplies and control bio-fouling.
2. **Textile Industry** — Functions as a powerful bleaching agent for natural and synthetic fibers, ensuring uniform whiteness and preparation for dyeing.
3. **Pulp and Paper** — Applied in the bleaching process to achieve high brightness levels in wood pulp without damaging the integrity of the cellulose fibers.
4. **Chemical Manufacturing** — Serves as a reliable oxidizing reagent in various organic synthesis and laboratory-scale chemical production processes.
5. **Metal Processing** — Utilized in surface treatment applications where controlled oxidation is required to modify metal properties or clean surfaces.

STORAGE & HANDLING

Proper storage is critical because Sodium Chlorite is a strong oxidizer that can intensify fires and pose explosion risks if exposed to organic materials or heat. It must be kept in a cool, dry, and well-ventilated area, isolated from incompatible substances to ensure facility safety and product stability.

- Store in a cool, dry place away from direct sunlight.
- Use containers made of HDPE or glass to prevent reactions.
- Avoid contact with acids or reducing agents to prevent hazardous reactions.
- Ensure proper ventilation when handling to minimize inhalation risks.
- Wear appropriate personal protective equipment (PPE) including gloves and goggles.

AVAILABLE PACKAGING

- 100 Lbs.

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



Hazard Statements:

- H271: May cause fire or explosion; strong oxidiser
- H272: May intensify fire; oxidiser
- H301: Toxic if swallowed
- H310: Fatal in contact with skin
- H314: Causes severe skin burns and eye damage
- H318: Causes serious eye damage
- H373: May cause damage to organs through prolonged or repeated exposure
- H400: Very toxic to aquatic life
- H410: Very toxic to aquatic life with long lasting effects
- H412: Harmful to aquatic life with long lasting effects

Emergency Contact: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

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